

Amendment to the Claims:

This listing of claims will replace all prior versions of claims in the application:

1. (Withdrawn). A synthetic resin emulsion comprising polymer particles having a core and shell structure, wherein said shell comprises a copolymer of an unsaturated carboxylic acid and a hydrophilic comonomer, said core comprises a copolymer of a monomer mixture, wherein said monomer mixture includes a radically polymerizable main monomer and a radically polymerizable functional monomer, and wherein the monomers constituting the monomer mixture are selected so that the glass transition point (T_g) of the copolymer of said core is -20°C. or below, and wherein said synthetic resin emulsion is produced by polymerizing said unsaturated carboxylic acid and said hydrophilic comonomer in an aqueous medium to form an aqueous copolymer solution, adding said monomer mixture for core formation to the copolymer solution when the copolymer is in an unneutralized state to form a reaction mixture, and polymerizing the reaction mixture while concurrently adding a pH adjustor to said aqueous copolymer solution.
2. (Withdrawn). A water-swellaable pressure-sensitive adhesive composition comprising said synthetic resin emulsion according to claim 1.
3. (Withdrawn). The synthetic resin emulsion according to claim 1 wherein said polymerizing step further comprises an emulsion polymerization reaction.
4. (Withdrawn). The synthetic resin emulsion according to claim 1, wherein said monomer mixture is added as an emulsion monomer solution to said aqueous copolymer solution.
5. (Withdrawn). The synthetic resin emulsion according to claim 1, wherein said synthetic resin emulsion has a pH of 7 or less.
6. (Withdrawn). The synthetic resin emulsion according to claim 1, wherein said unsaturated carboxylic acid is acrylic acid and said hydrophilic comonomer is (meth)acrylic acid hydroxy ester.

7. (Withdrawn). The synthetic resin emulsion according to claim 1, wherein said pH adjustor is at least one compound selected from the group consisting of alkali metal salts, ammonia, and amine.
8. (Withdrawn). The water-swellaible pressure-sensitive adhesive composition as claimed in claim 2, wherein said synthetic resin emulsion is a main component.
9. (Withdrawn). A pressure-sensitive adhesive sheet comprising a substrate sheet and said water-swellaible pressure-sensitive adhesive composition according to claim 2 coated onto a surface of said substrate sheet.
10. (Currently amended). A process for producing a synthetic resin emulsion comprising polymer particles having a core and shell structure, said shell including a copolymer of an unsaturated carboxylic acid and a hydrophilic comonomer, said core comprising a copolymer of a core monomer mixture including a radically polymerizable main monomer and a radically polymerizable functional monomer, said process comprising the steps of: providing an unsaturated carboxylic acid and a hydrophilic comonomer; polymerizing said unsaturated carboxylic acid and a hydrophilic comonomer in an aqueous medium to form an aqueous copolymer solution; and adding said core monomer mixture for core formation when the aqueous copolymer solution is in an unneutralized state to form a reaction mixture; concurrently emulsion polymerizing the reaction mixture and adding a pH adjuster to the aqueous copolymer solution, to form a synthetic resin emulsion, wherein said monomer mixture comprises monomers selected so that the glass transition point (T_g) of the core copolymer produced by polymerization is -20°C or below.
11. (Currently amended). The process for producing a synthetic resin emulsion according to claim 10, wherein, said core monomer mixture is added as an emulsion monomer solution that is prepared with an emulsifier.

12. (Withdrawn). A bonding method comprising the step of bonding a substrate and an adherend with the synthetic resin emulsion according to claim 1.

13. (Withdrawn). A method for bonding a pressure-sensitive adhesive sheet, comprising the steps of: coating the water-swellaable pressure-sensitive adhesive composition according to claim 2 onto a surface of a substrate sheet to form a pressure-sensitive adhesive sheet; and applying said pressure-sensitive adhesive sheet to an adherend.

14. (Withdrawn). A method for separating a pressure-sensitive adhesive sheet, comprising the steps of: applying water to said pressure-sensitive adhesive composition of said pressure-sensitive adhesive sheet according to claim 9 to swell said pressure-sensitive adhesive composition; and separating the pressure-sensitive adhesive sheet from the adherend.

15. (Previously presented). A method for making a pressure-sensitive adhesive comprising the step of adding a synthetic resin emulsion that is prepared according to claim 10 to the pressure sensitive adhesive during formation of the pressure sensitive adhesive.

16. (Withdrawn). A synthetic resin emulsion comprising polymer particles having a core and shell structure, wherein said shell comprises a copolymer of an unsaturated carboxylic acid and a hydrophilic comonomer, said core comprises a copolymer of a monomer mixture, wherein said monomer mixture includes a radically polymerizable main monomer and a radically polymerizable functional monomer, and wherein the monomers constituting the monomer mixture are selected so that the glass transition point (T_g) of the copolymer of said core is -20°C . or below.

17. (Withdrawn). A water swellaable pressure-sensitive adhesive composition comprising said synthetic resin emulsion according to claim 16.

18. (Withdrawn). The synthetic resin emulsion according to claim 16, wherein said synthetic resin emulsion has a pH of 7 or less.

19. (Withdrawn). The synthetic resin emulsion according to claim 16, wherein said unsaturated carboxylic acid is acrylic acid and said hydrophilic comonomer is (meth)acrylic acid hydroxy ester.

20. (Withdrawn). A synthetic resin emulsion produced in accordance with the process of claim 1.

21. (Previously presented). A process for producing a synthetic resin emulsion suitable for use in a pressure sensitive adhesive, wherein said emulsion has polymer particles with a core/shell structure, said process comprising the steps of:

a) polymerizing an unsaturated carboxylic acid monomer and a hydrophilic comonomer in an aqueous medium to produce a shell copolymer for the shell structure of the emulsion particles, where the copolymer is in solution in the aqueous medium;

b) combining core monomers with the aqueous medium to form a reaction mixture, and emulsion polymerizing the reaction mixture while concurrently at least partially neutralizing the shell copolymer in the aqueous medium by addition of a pH adjusting agent, to provide a synthetic resin emulsion having a core/shell structure which exhibits swelling in water without any alkali treatment, wherein said core monomers comprise radically polymerizable main monomer and a radically polymerizable functional monomer in the aqueous medium, and wherein said core monomers are selected such that the core polymer has a Tg of less than -20°C.

22. (New) The process according to claim 21, wherein shell copolymer is in an unneutralized state when the core monomers and pH adjusting agent are added to the aqueous medium.

23. (New) The process according to claim 21, wherein the core monomers are polymerized in the reaction mixture, while the pH of the reaction mixture is held at less than 7.